<u>Claims</u>

Please amend the claims as follows:

Bl

3. (Twice amended) A computer-implemented method for processing a signal, comprising:

receiving the signal representing nucleic acid information;

determining a complexity for the signal, the complexity relating to at least energy levels associated with the signal; and

making an allele call for the signal based on the determined complexity for the signal.

B2

- 14. (Twice amended) A system for processing a signal, comprising:
 - a processor configured to execute program instructions; and
 - a memory containing program instructions for execution by the processor to receive the signal representing nucleic acid information,

determine a complexity for the signal, the complexity relating to at least energy levels associated with the signal, and

make an allele call for the signal based on the determined complexity for the signal.

B3

FINNEGAN HENDERSON FARABOW GARRETT& DUNNER LLP

1300 I Street, NW Washington, DC 20005 202.408.4000 Fax 202.408.4400 www.finnegan.com 25. (Twice amended) A computer-readable medium containing instructions for controlling a computer system to perform a method for processing a signal, the method comprising:

receiving the signal representing nucleic acid information;

determining a complexity for the signal, the complexity relating to at least energy levels associated with the signal; and

making an allele call for the signal based on the determined complexity for the signal.

Bard

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